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PTO/SB/16 (5-03)

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INVENTOR(S)

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☐ Additional inventors are being named on the _____ separately numbered sheets attached hereto**TITLE OF THE INVENTION (280 characters max)**

Arrangement for Mobile Communications and Wireless Publishing

Direct all correspondence to:

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PATENT TRADEMARK OFFICE

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ENCLOSED APPLICATION PARTS (check all that apply)

| | | | |
|---|-----------|---|-------------------|
| <input checked="" type="checkbox"/> Specification Number of Pages | <u>15</u> | <input type="checkbox"/> CD(s), Number | <u> </u> |
| <input checked="" type="checkbox"/> Drawing(s) Number of Sheets | <u>23</u> | <input checked="" type="checkbox"/> Other (specify) | <u> </u> |
| <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76 | | | |

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METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT (check one)

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| <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. | FILING FEE AMOUNT (\$) |
| <input checked="" type="checkbox"/> A check or money order is enclosed to cover the filing fees | |
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The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

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| <input checked="" type="checkbox"/> No. |
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Respectfully submitted,

SIGNATURE

Date

06/18/03

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REGISTRATION NO.

32,492

(if appropriate)

Docket Number:

70097.010100

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Provisional Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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TITLE OF THE INVENTION

Arrangement for Mobile Communications and Wireless Publishing

DETAILED DESCRIPTION OF THE DRAWINGS

While this invention is susceptible to embodiment in many different forms, there are shown in the drawings and will be described in detail herein several specific embodiments, with the understanding that the present disclosure is to be considered as an exemplification of the principle of the invention and is not intended to limit the invention to the embodiments illustrated.

Figure 1 illustrates a prior art system for digital messaging in a mobile communications system made up of numerous wireless service providers. Digital messaging is commonly implemented via the SMS (Short Messaging System) standard. Each wireless service provider operates a SMS server configured to handle SMS messaging, such as SMS servers 10, 20, 30, 40, 50 and 60. A SMS server receives SMS messages from mobile telephone users of its affiliated wireless service provider, and transmits SMS messages to that service provider's mobile telephone users.

When digital messages are conveyed between a mobile telephone user and an entity outside of the network operated by the mobile telephone user's service provider, such messages are typically conveyed using MIME (Multipurpose Internet Mail Extensions) formatting. The MIME format is intended to provide standard mechanisms for transmitting digital content. Thus, service providers typically provide a MIME server configured to translate digital messages between a service provider's designated

formatting, and a format based upon MIME standards. MIME servers 11, 21, 31, 41, 51 and 61 are provided in the communication system of Figure 1.

However, the implementation of MIME does not dictate identical handling of digital messages by each wireless service provider. Wireless service providers may use varying MIME translations to and from their designated messaging protocols within their own networks. Thus, the formatting and content of digital messages can be altered or lost during conversion processes as messages are communicated to and from users on different networks.

Figure 2 illustrates a communication system according to the present invention which provides consistent and reliable digital messaging capabilities for communications with mobile telephone subscribers using multiple different wireless service providers. The communication system implements advanced messaging functionality that is interoperable across a wide variety of wireless communication platforms and standards, and subscriber hardware. For example, the system can provide advanced text messaging across a large number of different wireless service provider networks, using a combination of SMS and wireless Internet protocols implemented by many so-called "2G" cellular telephones, and substantially all "2.5G" and "3G" cellular telephones.

The communication system includes digital content server 100. Digital content server 100 can be configured to implement both MIME server and SMS server functionality, as well as other functionality. Digital content server 100 enables digital messaging with mobile telephones 600, 610, 620, 630, 640 and 650, which mobile telephones communicate with cellular networks 500, 510, 520, 530, 540 and 550,

respectively. Of course, while the system of Figure 2 is illustrated having mobile telephones 600-650 as subscriber devices, it is understood that other types of subscriber units (two-way pagers, PDAs, integrated telephone/PDAs, etc.) could also readily be employed. Each of cellular networks 500-550 are operated by different wireless service providers. Each wireless service provider operates an SMS (Short Messaging System) server. Each of SMS servers 400, 410, 420, 430, 440 and 450 are capable of communicating with Internet 300, as well as the cellular networks with which they are associated. The SMS servers enable mobile telephone users to transmit and receive short digital messages, thus providing non-voice communication capabilities to mobile telephone users.

In addition to being configured for communication with their associated wireless networks, the SMS servers are configured for communication with Internet 300 by employing MIME formatting for the digital content communicated thereon. Thus, the servers can receive messaging in a MIME format from Internet 300, allowing for transmission of email and other digital messaging from sources outside of the wireless network with which each proprietary SMS server is associated. Outbound digital content can be sent through a service provider MIME server (not shown) to enable MIME-enabled recipients to receive and properly decode digital content generated by mobile users.

One technique for digital messaging that can be implemented using digital content server 100 is illustrated in the flowchart of Figure 3. First, digital messaging content is generated in step 1000. Next, SMS messages are transmitted by digital content server 100, step 2000. The SMS messages are conveyed to mobile telephone

subscribers, and may be used to invoke a subscriber's wireless web browser, step 3000. Finally, further messaging can be provided through service of digital content as web pages, step 4000.

One embodiment of step 1000 for generating digital messaging content is further illustrated in the flowchart of Figure 4. Initially, recipients are configured in step 1010. Figure 5 illustrates a screen providing for the configuration of a message recipient. Fields are provided to store information regarding a user, including the user's name, email address, digital messaging address, user name, password, security PIN code, user type, notification type and subscriber ID. The user can be further designated as Active or Inactive.

The user's Notification Type designation determines the formatting rules that are employed when messages to that user are MIME-encoded. Digital content server 100 is configured with information describing specific MIME formats used by various wireless service providers. By custom encoding user messages for the specific MIME formatting employed by the message recipient's wireless service provider, the user can be assured of reliably receiving digital messages having consistent and optimal layout and display of the message content. When a recipient profile is configured in step 1010, digital content server 100 can be configured to examine the domain name extension of the recipient's digital messaging address. If the domain name extension is recognized as being associated with a MIME format for which the digital content server is configured, the Notification Type corresponding to the address domain name extension is automatically selected.

Content server 100 also provides for configuration of recipient groups, allowing convenient preparation and transmission of digital messaging to predetermined sets of recipients. Figure 6 illustrates a group configuration feature of content server 100. A Group Name can be defined, and a plurality of users can be selected as group members. Furthermore, the entire group can be designated as Active or Inactive.

Group membership can also be configured on an individual recipient basis, via the recipient configuration screen of Figure 7. A plurality of group names are displayed in region 701. The recipient can be included in, or excluded from, each group through selection or deselection of the check box associated with each group name.

Once individual recipients, and optionally group recipients, are configured, digital messaging content can be created, step 1020 (Fig. 4). A content creation mechanism is illustrated in Figure 8. The content creation screen of Figure 8 supports both text and image content. Field 710 is provided for identification of a message title. Field 711 allows for the incorporation of image data into the message under composition. Finally, text content can be added to field 712, either via manual entry of the desired text or via automated cutting and pasting of content from other applications. Field 713 provides an automated count of the number of characters of text present within field 712, providing feedback regarding the size of the message that is being created. However, the size of the message entered into field 712 need not be restricted by a predetermined maximum length.

Once a message has been created, the message recipients can be identified, step 1030 (Fig. 4). The screen of Figure 9 provides a mechanism for identifying recipients. Predetermined groups of recipients can be selected using the group

selection region 720. Also, individual recipients can be selected using the individual selection region 721.

Messages can be provided with various expiration options to provide a system administrator with enhanced control over message management. Typical prior art SMS servers are configured to maintain messages on the server for a predetermined period of time. However, field 722 allows for the determination of a message expiration period which can be individually set for each message that is composed. Thus, for example, important messages can be configured to be maintained for extended periods of time, while unimportant messages can be quickly deleted. This allows for optimal employment of server storage resources. Also, a read-once expiration option causes a message to be automatically deleted immediately after the message has been read. Such a read-once option may be useful for security purposes, towards ensuring that messages are destroyed after receipt and not unnecessarily available for unauthorized access.

Once recipients are selected, SMS messages are generated for each recipient, step 1040. Initially, a message is created for each recipient that includes a wireless web link that can be accessed by the recipient. The link generated for each recipient can be uniquely associated with the corresponding message content, thus enabling subsequent retrieval of message content by content server 100 when the recipient accesses the link. The formatting and content of the wireless web link sent to each user depends upon the MIME requirements of the service provider associated with the message recipient.

Once generated, the SMS messages are transmitted, step 2000 (Fig. 3). One technique for transmitting the messages is illustrated in the flowchart of Figure 10. Duplicate messages are removed in step 2010. Duplicate messages may be generated when a message identifies a particular individual recipient more than once, such as when a message is sent to a specific individual user as well as one or more groups of which that same user is a member. By searching for and removing duplicate messages in step 2010, care is taken to avoid transmission of the same message to a particular recipient more than once.

After any duplicate messages are removed, content server 100 evaluates the size of the message distribution list to determine a desired technique for sending the messages, step 2020. If the size of the distribution list is below a predetermined threshold (*i.e.* 10,000 users), then the load imposed on the server to transmit the messages is sufficient low that the messages can be rapidly and reliably transmitted in a serial fashion, step 2030. However, when the server requirements for transmitting the messages exceed a given threshold, alternate message transmission techniques can be employed (*e.g.* steps 2040 and 2050). In step 2040, messages are grouped for delivery based upon various attributes. For example, messages may be grouped by one or more of a variety of attributes, including by: the recipients' wireless service providers, alphabetically by recipient name, by title, geographic area, or any designation that may be captured within the user database. The messages can then be sent out in a parallel fashion by multiple servers, step 2050, whereby each grouping is routed to a different server. Such parallel transmission facilitates more rapid message transmission and potentially more efficient data routing.

Whether sent out serially by a single server, or in a parallel manner, the messages are routed via Internet 300 (Fig. 2) to wireless service provider SMS servers 400-450. The messages are then conveyed via wireless service provider networks 500-550, to mobile phone users 600-650.

Once a SMS message is received by a subscriber's cellular telephone, the recipient can read the SMS message, thereby causing the subscriber unit to automatically access the wireless Internet link, step 3000 (Fig. 3). The subscriber unit then uses integrated wireless web browser functionality to access the message content from digital content server 100 as a series of web pages, step 4000. Messaging content can be conveyed to the subscriber unit using WML (Wireless Markup Language). Alternatively, subscriber unit web browsers may utilize standards such as WAP (Wireless Application Protocol), WML (Wireless Markup Language), HDML (Handheld Device Markup Language) and/or XHTML (Extensible HyperText Markup Language) to display the messaging content.

Content server 100 converts the unlimited-length message contents, including text and optionally graphics, into a series of web pages that can be navigated by the subscriber. The web pages are then automatically served from content server 100. By providing messaging by using a recipient's web browser functionality rather than SMS, limitations on message length that are imposed by SMS messaging can be avoided. After a full web page of message text and/or graphics has been displayed to the subscriber, a "MORE" link is provided to initiate retrieval of the next of an arbitrary number of pages of message content, analogous to turning the pages of a book. Also,

by utilizing web browser functionality of a subscriber device, images can be integrated with text in a common message.

Content server 100 can also apply security features to its messaging. In creating a message, user authentication can optionally be required to assist in preventing unintended individuals from viewing the message contents. Content server 100 can store the subscriber ID of each user, as well as a PIN code. The subscriber ID is typically used by wireless service providers for tracking network usage, maintaining billing records and sometimes for certain security purposes. The subscriber ID is typically a 12 digit alphanumeric code that is uniquely assigned to a given subscriber, and stored within the cellphone assigned to the subscriber.

A PIN code can also be stored within content server 100 and associated with each user. The PIN code is preferably a numeric code of approximately 10 digits in length. The PIN code can be assigned to each user by the administrator of content server 100.

Upon receiving a request to transmit message content, digital content server 100 examines the subscriber ID and the PIN code received from the requesting subscriber in conjunction with the request. If the subscriber ID and PIN code do not correspond to known values for a recipient of the requested message, then the message request is denied and no message content is transmitted.

An additional level of security can be provided by associating a password demand with a given message during the message configuration process. If a message is password protected, content server 100 initially returns a password query after the subscriber initiates the web link from the initial SMS message that is received by the

subscriber. If the subscriber does not respond by providing the password associated with the subscriber, then access to the message contents is denied.

By using the Subscriber ID and PIN code for authentication, a user can readily upgrade subscriber hardware while maintaining the same service provider without causing an interruption in messaging service and without requiring manual intervention on the part of the operator of digital content server 100. This is because the Subscriber ID stays with the subscriber, and would be programmed into any new subscriber hardware to which a user may upgrade. Also, if a corporation or other entity provides wireless service for a subscriber, that subscriber will no longer be able to use the messaging system once the sponsoring organization closes an account, since the subscriber would receive a new Subscriber ID even when keeping the same cellphone and/or the same wireless service provider.

Also, the authentication procedures described herein prevents an unauthorized individual who learns of the PIN code and/or password of a messaging subscriber from accessing messages on digital content server 100 using a different subscriber unit, since the unauthorized user's Subscriber ID would not correspond to the Subscriber ID stored within content server 100. Also, when an account is designated INACTIVE within the Status field of the user configuration stored by content server 100, the associated Subscriber ID is blocked from accessing messaging and web-based content.

A final level of security can be provided on a link-by-link basis within a message having multiple links or menu options. In generating a message, various options and links can optionally be configured for access by only specified users. When transmitting the message content, content server 100 adapts the transmitting content based upon

the content that is available to the requesting user. Thus, the subscriber unit of a user who is not authorized to access a particular link will not display the unauthorized link. An operator of content server 100 can dynamically maintain the list of authorized users for each link to control access to specific information at any given time. Additional security can be provided by implementing encryption techniques to encrypt the data that is transmitted between content server 100 and a wireless subscriber, towards preventing interception of transmitted information by unauthorized individuals.

Content server 100 also provides a software interface through which message content and wireless web pages can be quickly and easily configured. The interface provides for assembly of hierarchical information structures. For example, Figure 11 illustrates one aspect of such a message configuration utility. After selecting "Menu Setup" option 730, an operator can enter the name of a menu selection in Menu Text field 731. Menu text labels can be configured in a hierarchical organization. At the lowest hierarchy levels, information can be provided in Menu Detail field 732. Information can be entered into Menu Detail field 732 manually, or by cutting and pasting content from other applications. Once a menu label or detail item is configured, Add button 733 can be selected to add the new item to the web page under construction. Figures 12 and 13 illustrate the creation of a web page using the configuration tool, having a top-level menu called "Akrosyn ELITE Program", with four selections designated "About Us," "Products and Services," "Member Benefits," and "Advisory Board."

Security settings can be optionally applied to each menu item, through the interface of Figure 14. Access to the selected menu item can be restricted to selected

users and groups by selecting authorized users and/or groups within region 740. If no users or groups are selected, the menu item is available to all users.

The message configuration tool also provides for transmission of messages with embedded graphic images through the interface illustrated in Figure 15. Add Message selection 750 can be chosen from configuration tool selection bar 751, to initiate message configuration window 752. Window 752 can be used to create and transmit a message, as previously described in connection with Figures 8-9.

Sent messages can be reviewed by selecting "Messages" option 760 on the configuration tool interface of Figure 16. Information regarding a sent message is displayed, including title, sender, date and time sent, expiration date and message contents. Also, region 761 identifies the status of delivery attempts for the displayed message. For each user name, information is provided indicating whether the message was successfully delivered, and if so, the date and time at which the message was viewed by the recipient, if at all. When message delivery fails, Resend selection item 762 is provided to initiate retransmission of the message to the associated user.

In accordance with another aspect of the invention, content server 100 can generate hierarchical web pages having both text and graphic images embedded within them. Such integration of unlimited text and graphics in a hierarchical data structure enables ready publication of information to users of wireless phones and like devices. Figure 22 illustrates the application of such a feature in the context of the wireless publication of real estate listings. The hierarchical publication is generally created in a manner analogous to that of the text-based documents illustrated in Figures 12-13. However, additional field 800 is provided, allowing for the selection of one or more

graphic images to be associated with the menu item being defined. Thus, in region 802, a plurality of menu items are created, in which each menu item is associated with a property for which a real estate listing is available. A photograph of the property can then be associated with each real estate listing, enabling a potential buyer to view the property via a wireless telephone.

For each menu item (representing, in this case, a property listing), subsidiary menu items can be created beneath each property listing item, providing further information about the property. For example, in Figure 23, additional sub-menu items are provided within region 804 indicating, for property listing 806, the street address of the listing, and various rooms within the house on the property. One or more graphic images can be associated with each room sub-menu item through use of field 800, providing a digital photograph of the room. Once created, the hierarchical web page with integrated graphics and images can be navigated by a wireless telephone or like device, as illustrated in Figure 24. In addition to real estate listings, such web pages can be used to publish other types of documents and/or information, including magazine articles with photos and/or diagrams, to users of cellular telephones.

The message configuration tool can also be used to develop and transmit interactive quizzes to users via the interface of Figure 17. Option 770 can be selected in the configuration tool selection bar to generate a new quiz message. The Quiz Title and Category are entered in fields 771 and 772, respectively. The quiz can be designated as Active or Inactive via Status field 773. Region 774 can be selected to add a question to the quiz under development. For each question, multiple possible answers can be specified. Examples of quiz questions are illustrated in regions 775

and 776. Once a quiz question is designed, it can be transmitted analogously to the messages providing text and/or graphics, discussed above. However, when a subscriber receives and activates a SMS link, the recipient's subscriber unit retrieves web pages displaying the quiz questions and requesting responses from the recipient.

Responses to quiz questions are received and tabulated by content server 100. Optionally, a message can be sent to the quiz recipient after the recipient's responses are received, towards providing feedback to the user regarding his or her answers. For example, in the case of an opinion poll, content server 100 can transmit a web page to the user indicating a summary of answers received by other users. If the quiz questions are objective, having correct and incorrect answers, content server 100 can transmit a web page to the user indicating what the correct answers were, and how many questions were answered correctly and/or incorrectly.

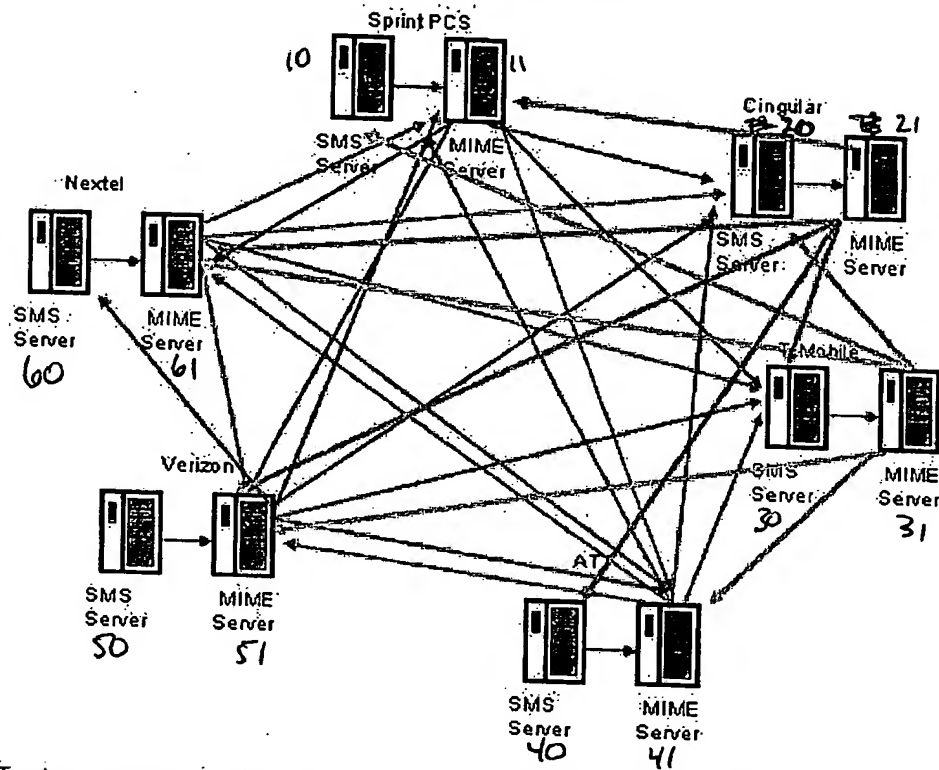
Content server 100 also provides an interface by which quiz results can be analyzed. Figure 18 illustrates a display indicating the responses received for each quiz. Also, Figure 19 illustrates a display whereby a designated user's specific quiz answers can be displayed.

The message configuration tool also provides an interface to add new users to the system, illustrated in Figure 20. The addition of a new user is initiated through selection of item 780 within the configuration tool selection bar. User information is entered into fields within region 781, as described previously in connection with Figures 5-7. Once a user accesses content server 100 for the first time, the user's Subscriber ID is captured and populated within a content server database. The Subscriber ID and

other security information can subsequently be viewed and edited through the interface of Figure 21.

The foregoing description and drawings merely explain and illustrate the invention and the invention is not limited thereto, inasmuch as those skilled in the art, having the present disclosure before them will be able to make modifications and variations therein without departing from the scope of the invention.

Why wireless carriers are not interoperable with problems of MIME



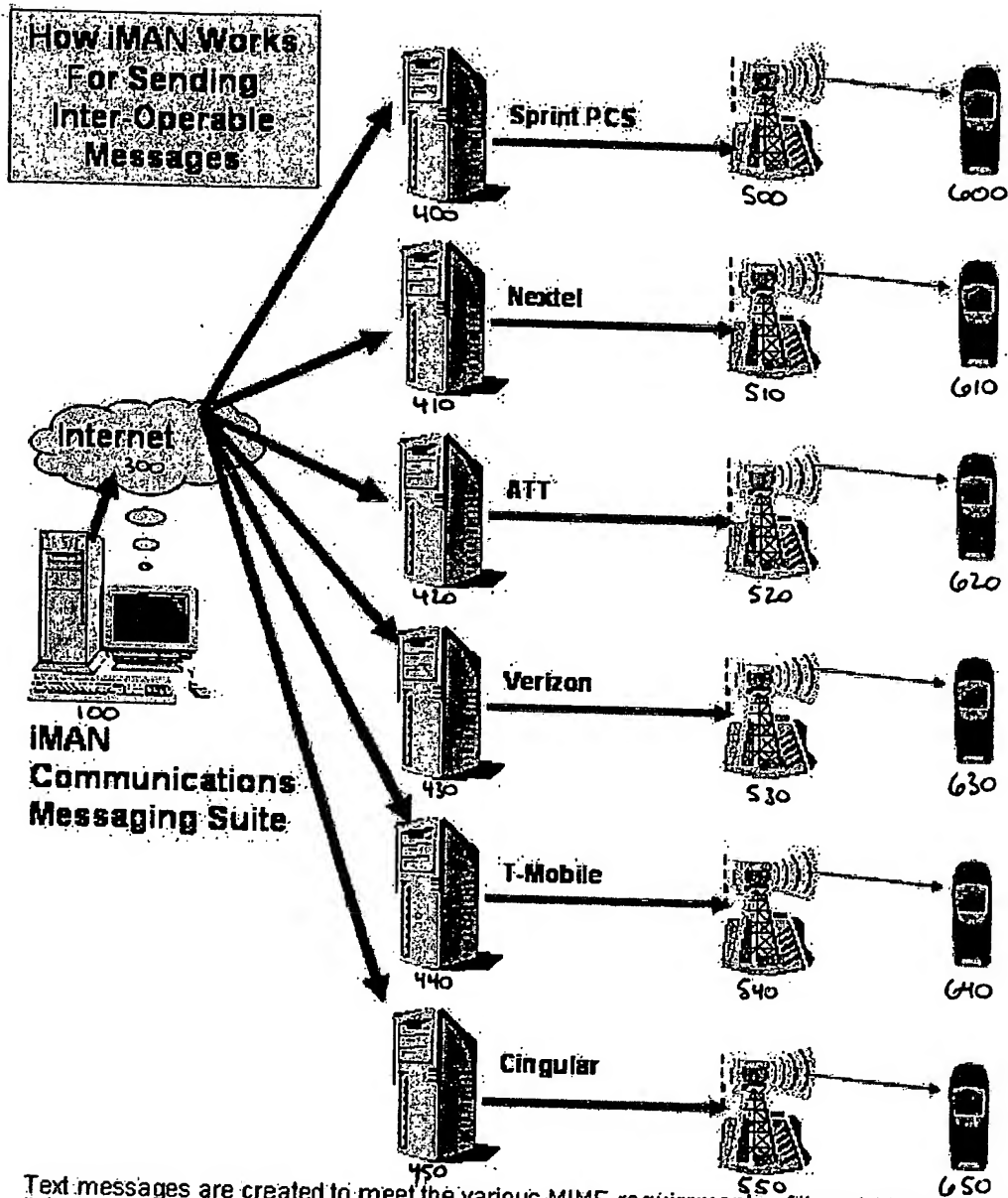
Text messages have to be changed to meet the various MIME requirements causing a great deal of conversion and lost messages.

1. Cell Phone send SMS to carrier's SMS server
2. SMS Server sends to MIME Server for conversion
3. Carrier's MIME send to SMS server
4. Carriers SMS Server sends to their customer wireless phone

FIG. 1

FIG. 2

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Text messages are created to meet the various MIME requirements of the wireless carriers:

1. IMAN SMS Server sends to MIME Server
2. IMAN MIME Server sends to message to other carriers SMS servers
3. Wireless carriers SMS Server sends SMS to their customer's phone

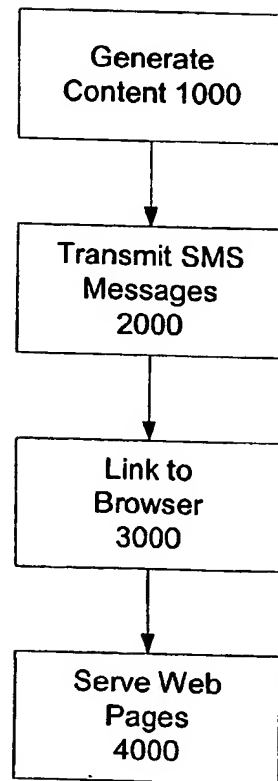


Fig. 3

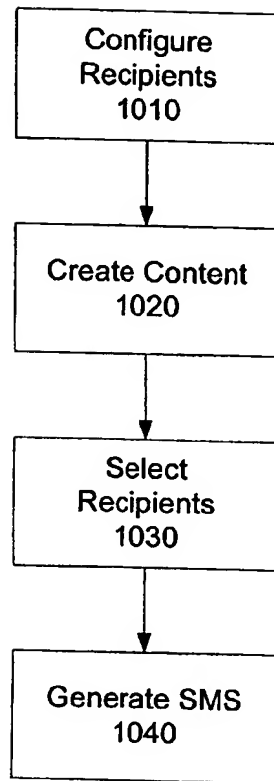


Fig. 4

FIG. 5

Edit User

Status ☒ Active

First Name

Last Name

Email

Messaging **Mobile.att.net**

User Name

Password

PIN (Used to access account on phone. Must be numeric!)

User Type

Notification Type ☒ AT&T

Subscriber ID

Select the Group

Nextel
Sprint 2G
Sprint 3G
T-Mobile
Verizon

ncies

Edit Group

Status ☒ Active

Group Name

Select the Users in this Group

| User Type | SubscriberID |
|--|--|
| <input checked="" type="checkbox"/> Guest | lvMDwnjz8qnAs01_up2.upl.sprintpcs.com |
| <input checked="" type="checkbox"/> Guest | dNiQLetfGhuwe4s01_up2.upl.sprintpcs.com |
| <input checked="" type="checkbox"/> Paul Karicek | |
| <input checked="" type="checkbox"/> Verizon | 1023717439-1340086_njbdmessenger.mobileweb.myvzw.com |
| <input checked="" type="checkbox"/> Christie, Jack | jchris09@sprintpcs.com |
| <input checked="" type="checkbox"/> Gandza, Ron | Manager YRkC+pWb4E9WS3PW1R8uo0w-@sprintpcs.com |
| <input checked="" type="checkbox"/> Guest, Welcome | |
| <input checked="" type="checkbox"/> Maier, John | Manager 483900930@messaging.sprintpcs.com |
| <input checked="" type="checkbox"/> Muglia, Jeff | |
| <input checked="" type="checkbox"/> Oneal, Shawn | |
| <input checked="" type="checkbox"/> Palm I300, John | y5-WAxy8w7vzs01_up2.upl.sprintpcs.com |
| <input checked="" type="checkbox"/> Pelak, Katheryne | Manager kFEDW1UzHxkYs01_up2.upl.sprintpcs.com |
| <input checked="" type="checkbox"/> Simatic, Russ | 6123865050@messaging.sprintpcs.com |

SAVE

FIG 6

Edit User

Status ☒ Active

First Name

Last Name

Email

Messaging

User Name

Password

PIN #26598465 (Used to access account on phone. Must be numeric!)

User Type ☒ Manager

Notification Type ☒ Sprint 3G

Subscriber ID

Select the Group for this User

- ☒ Intel Agencies
- ☒ Military
- ☒ CIA
- ☒ FBI
- ☒ SECRET SERVICE
- ☒ EMERGENCY RESPONSE TEAM
- ☒ STATE DEPARTMENT

MIME TYPE

Checking these boxes will allow a user to get all messages sent to that distribution list

-701-

FIG. 7

FIG. 8

Add New Message

Title — 710

Image — 711

Every 1000 characters will be displayed on a new page on the phone.
The Num Chars field below shows the number of characters in your message.

Message — 712

Num Chars — 713

Send Message

Title

Image

Every 1000 characters will be displayed on a new page on the phone.
The Num Chars field below shows the number of characters in your message.

Message

Num Chars

Send the Message to these Groups

- ☒ ☐ Akrosyn -720-
- ☒ CIA
- ☒ EMERGENCY RESPONSE TEAM
- ☒ FBI
- ☒ IDR
- ☒ Sanders, Ron
- ☒ Simatic, Russ
- ☒ Tyson, Keith 721
- ☒ User, Guest
- ☒ User, Guest
- ☒ Valtos, Tony
- ☒ Vile, Richard

21 722 Number of days until message expires
(leave blank for no expiration for message)

FIG. 9

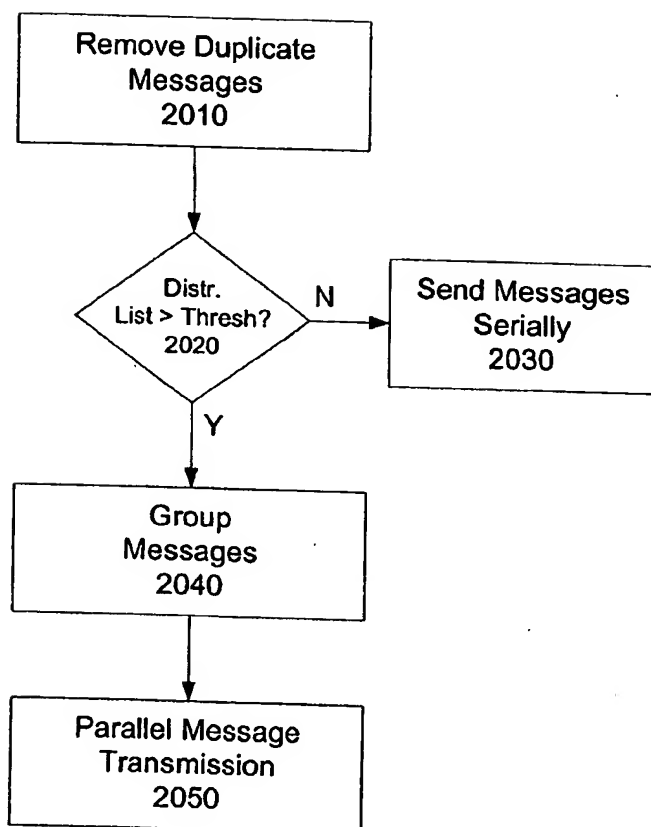


Fig. 10

| | | | | | | | |
|-------------------------|-------------|----------------|------------------|----------------------|---------------|-------------|-------------|
| Field Data Capture Site | <u>edit</u> | <u>move up</u> | <u>move down</u> | <u>view children</u> | <u>delete</u> | <u>move</u> | <u>copy</u> |
| Homeland Security | <u>edit</u> | <u>move up</u> | <u>move down</u> | <u>view children</u> | <u>delete</u> | <u>move</u> | <u>copy</u> |
| Home Sec Alt Set Up | <u>edit</u> | <u>move up</u> | <u>move down</u> | <u>view children</u> | <u>delete</u> | <u>move</u> | <u>copy</u> |
| Memphis, PD | <u>edit</u> | <u>move up</u> | <u>move down</u> | <u>view children</u> | <u>delete</u> | <u>move</u> | <u>copy</u> |
| IDR | <u>edit</u> | <u>move up</u> | <u>move down</u> | <u>view children</u> | <u>delete</u> | <u>move</u> | <u>copy</u> |
| Keith | <u>edit</u> | <u>move up</u> | <u>move down</u> | <u>view children</u> | <u>delete</u> | <u>move</u> | <u>copy</u> |
| | <u>edit</u> | <u>move up</u> | <u>move down</u> | <u>view children</u> | <u>delete</u> | <u>move</u> | <u>copy</u> |
| Project Management | <u>edit</u> | <u>move up</u> | <u>move down</u> | <u>view children</u> | <u>delete</u> | <u>move</u> | <u>copy</u> |
| Akrosyn ELITE Program | <u>edit</u> | <u>move up</u> | <u>move down</u> | <u>view children</u> | <u>delete</u> | <u>move</u> | <u>copy</u> |

New Menu Item

Menu Text

Menu Detail
(enter detail text
only for menu
items that do not
have children)

Length: characters

Every 1000 characters will be displayed on a new page on the phone.

733 —

731

732-

FIG. 12

Add User

Users

Add Group

Groups

Add Quiz

Quizzes

Add Message

Messages

Menu Setup

Reports/Charts

Users Manual

Menu Setup

Main Menu

Aktrosyn ELITE Program

About Us

Show Detail

Import Children from Excel

Mission

edit

move up

move down

view children

delete

move

copy

Background

edit

move up

move down

view children

delete

move

copy

Information

New Menu Item

Menu Text

Menu Detail

(enter detail text only for menu items that do not have children)

Length: characters

Every 1000 characters will be displayed on a new page on the phone.

Add

Notice we are making more details available in sub menus

Menu placement can be adjusted by moving the item up or down

60479560 . 064801

| | |
|-----------------------|---|
| <u>Add User</u> | <u>Menu Setup</u> |
| <u>Users</u> | <u>Main Menu</u> |
| <u>Add Group</u> | Akrosyn ELITE Program |
| <u>Groups</u> | <u>About Us</u> <u>Show Detail</u> <u>Import Children from Excel</u> |
| <u>Add Quiz</u> | <u>Products and Services</u> <u>edit</u> <u>move up</u> <u>move down</u> <u>view children</u> <u>delete</u> <u>move</u> <u>copy</u> |
| <u>Quizzes</u> | <u>Member Benefits</u> <u>edit</u> <u>move up</u> <u>move down</u> <u>view children</u> <u>delete</u> <u>move</u> <u>copy</u> |
| <u>Add Message</u> | <u>Advisory Board</u> <u>edit</u> <u>move up</u> <u>move down</u> <u>view children</u> <u>delete</u> <u>move</u> <u>copy</u> |
| <u>Messages</u> | |
| <u>Menu Setup</u> | |
| <u>Reports/Charts</u> | |
| <u>Users Manual</u> | |

New Menu Item

Menu Text

Menu Detail
(enter detail text only for menu items that do not have children)

Background Information

If no text is entered in this box, then sub menus can be created

Length: characters

Every 1000 characters will be displayed on a new page on the phone.

FIG. 13

FIG. 14

[Add User](#)
[Users](#)
[Add Group](#)
[Groups](#)
[Add Quiz](#)
[Quizzes](#)
[Add Message](#)
[Messages](#)
[Menu Setup](#)
[Reports/Charts](#)
[Users Manual](#)

[Edit Menu Item](#)
[Back to Menu](#)

Menu Text

Background Information

Detail

We were founded in 2002 to address some of the major training and education problems facing the IT industry, with the biggest being the dynamic nature of information technology. It is common knowledge that the

Length: 341 characters

Every 1000 characters will be displayed on a new page on the phone

Permit Groups for this Menu Item (Leave blank if everyone has access).

☐ Intel Agencies
☐ Military
☐ FBI
☐ CIA
☐ SECRET SERVICE
☐ EMERGENCY RESPONSE TEAM
☐ STATE DEPARTMENT
☐ IDR
☐ JOE
☐ test

FIG. 15

751

Add User
Users

Add Group
Groups

Add Quiz
Quizzes

Add Message
Messages

Menu Setup

Reports/Charts

Users Manual

Add New Message

Title

Image

Every 1000 characters will be displayed on a new page on the phone.
The Num Chars field below shows the number of characters in your message.

Message

Num Chars

752

750

FIG. 16

[Add User](#)
[Users](#)

[Add Group](#)
[Groups](#)

[Add Quiz](#)
[Quizzes](#)

[Add Message](#)
[Messages](#) 1

[Menu Setup](#)

[Reports/Charts](#)

[Users Manual](#)


View Message

Title
Wanted Poster

Sent By
John Maier Master

Sent
5/12/2003 4:38:26 PM

Expires
No Expiration Date



Message

**MURDER OF U.S. NATIONALS OUTSIDE THE UNITED STATES;
CONSPIRACY TO MURDER U.S. NATIONALS OUTSIDE THE**

Aliases: Osama Bin Muhammad Bin Ladin, Shaykh Usama Bin Ladin, the Prince, the Emir, Abu Abdallah, Mujahid Shaykh, Hajj, the Director

DESCRIPTION

DOB 1957 **Hair** Brown

Place of Birth: Saudi Arabia **Eyes:** Brown

Height: 6'4" **Complexion:** Olive

Weight: 160 pounds **Sex:** Male


Message was sent to these Users

| Resend | Group | User | Message Status | Viewed On |
|--------|-------|------------------|----------------|----------------------|
| 762 | | Guest #1 | Success | No Viewed |
| | | Guest #3 | Success | 11/4/2002 4:48:38 PM |
| | | Guest #5 | Success | 11/4/2002 9:10:07 AM |
| | | Bradley, Spencer | Success | No Viewed |

60475550 : 06/2003

Responses are available from cell phones and other wireless devices can occur in 770 wireless quizzes and opinion polls

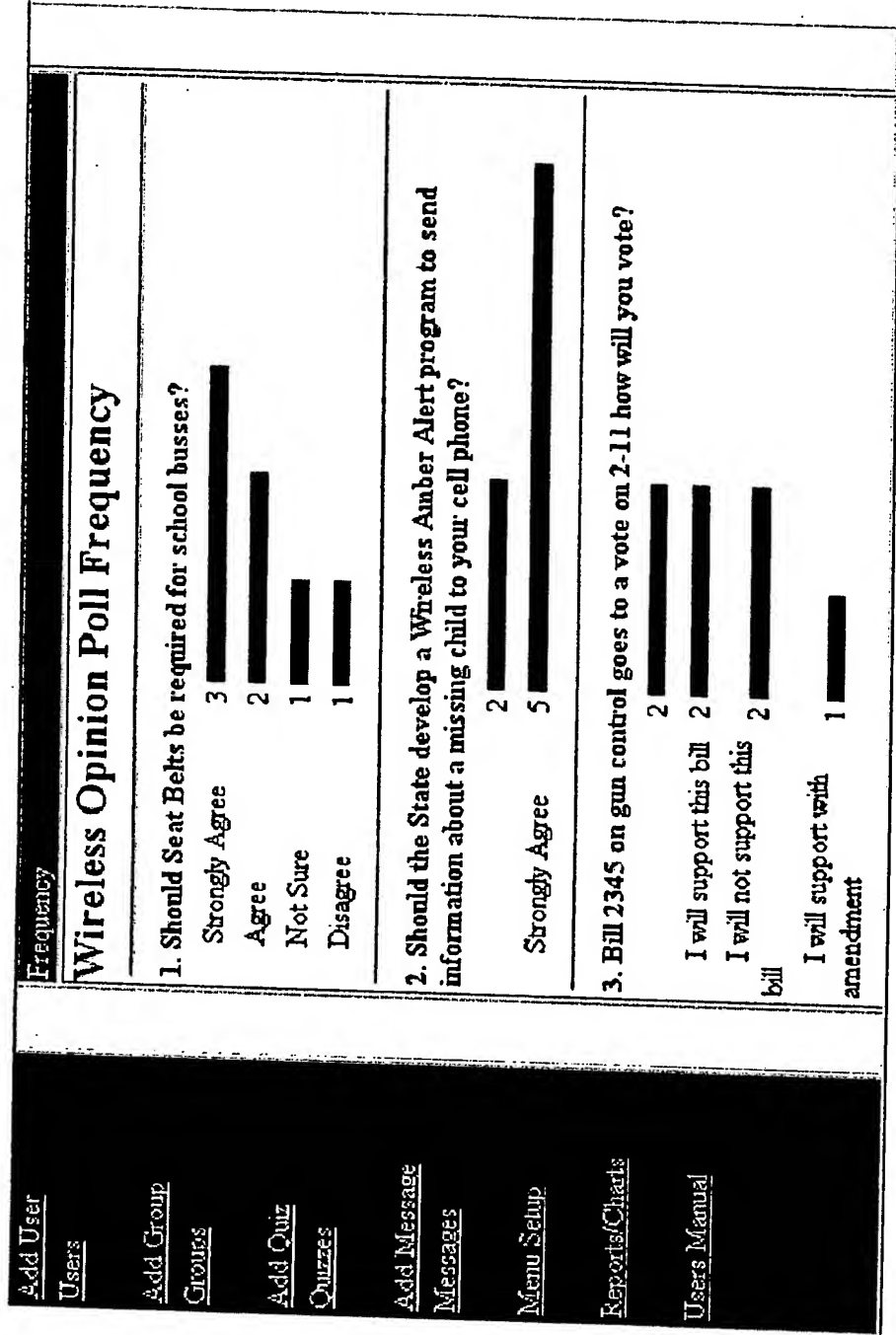
FIG. 17

| | |
|--|---|
| Add User Users Add Group Groups Add Quiz Quizzes Add Message Messages Menu Setup Reports/Charts Users Manual | Edit Quiz Send Quiz <div> <div>Status</div> <div>Active </div> <div>Quiz Title</div> <div>Medical Alert</div> <div>Category</div> <div>Help needed Now</div> </div> <div> <div>Save</div> <div>Cancel</div> </div> <div> Add Question — 774 </div> <div> 1. Blood Donors we have an urgent need for your blood type, Can you come in and donate now? Edit Delete YES Not now, but later today I can Sorry I can't this time -775 - </div> <div> 2. 2nd shift medical staff can you report for duty 2 hours earlier as we have a medical emergency! Edit Delete Yes, I am on my way Yes I will be in as soon as possible Not available until then -776 - </div> |
|--|---|

40479560 - 05.1003

Questions are asked without a text limit with multiple choice answers provided in the Test or Opinion Poll. Respondents highlight their answers on the phone and press submit. The iMAN computer captures all responses individually and provides A frequency analysis for each question, on what answers were submitted

Fig. 18



00479550.061000

[Add User](#)
[Users](#)
[Add Group](#)
[Groups](#)
[Add Quiz](#)
[Quizzes](#)
[Add Message](#)
[Messages](#)
[Menu Setup](#)
[Reports/Charts](#)
[Users Manual](#)

Scores

Wireless Opinion Poll Scores

| | |
|---|------------|
| Mike Noff - 1/22/2003 12:44:13 PM | 1 out of 2 |
| Mike Noff - 1/24/2003 9:48:30 AM | 1 out of 2 |
| imglia - 1/30/2003 11:18:05 AM | 1 out of 2 |
| Mike Noff - 1/22/2003 11:37:18 AM | 0 out of 2 |
| Mike Noff - 1/22/2003 11:48:23 AM | 0 out of 2 |
| Mike Noff - 1/23/2003 1:09:28 PM | 0 out of 2 |
| imglia - 2/20/2003 1:48:25 PM | 0 out of 2 |

Click here to see how each question was answered by each person.

Here are the individual score results for each person taking the test or opinion poll. This information is found when clicking on Reports and Charts.

FIG 19

Add New User Table

Fig. 20

[Add User](#)

[Users](#)

[Add Group](#)

[Groups](#)

[Add Quiz](#)

[Quizzes](#)

[Add Message](#)

[Messages](#)

[Menu Setup](#)

[Reports/Charts](#)

[Users Manual](#)

Add New User

First Name

Last Name

Email

Messaging

User Name

Password

PIN

User Type

Notification Type

-781-

Security Information

(Used to access account on phone. Must be numeric!)

AT&T

AT&T

Nextel

Sprint 2G

Sprint 3G

T-Mobile

Verizon

Phone Carrier Information

User type and be User or Manager

Users only see information from a wireless device

Managers can add content by computer

00475560 .06480N

Additional Security

FIG. 21

[Add User](#)
[Users](#)
[WWW Sites](#)

Edit User

Status ☒ Active

First Name

Last Name

Email

User Name

Password

PIN (Used to access account on phone. Must be numeric!)

User Type ☒ Manager

Subscriber ID

Save

Additional Security is achieved after the person views the website for the first time.

We capture the Subscriber ID and match it to the PIN# to create over 4 Trillion code combinations.

If the PIN # and Subscriber ID do not match authorization is not allowed. The subscriber ID is a unique code for each phone, so an authorized user on a different phone can not access the site.

60470660 00630000

Attach an image like the messaging program to any menu item.

FIG. 23

Add User
Users

Add Group
Groups

Add Quiz
Quizzes

Add Message
Messages

Menu Setup

Reports/Charts

Users Manual

Menu Setup

Main Menu

Crye-Leike REALTORS®

Memphis area

\$100,000 to \$200,000

\$169,850 GERMANTOWN 806

Show Detail Import Children from Excel

edit move up move down view children delete move copy

8121

KIMBROOK

Bedroom edit move up move down view children delete move copy

DEN edit move up move down view children delete move copy

Dining edit move up move down view children delete move copy

New Menu Item

Menu Text

Image Browse...

Menu Detail
(enter detail text only for menu items that do not have children)

Above we show the house with text in the 8121 Kimbrook menu item then we show the additional rooms with photos in the sub menus for cell phones.

Length: characters

Every 1000 characters will be displayed on a new page on the phone.

00479500 . 051100

FIG. 24

This is the result of the previous slide menu setup on a cell phone

- 1) Here is the main menu item for the home listed in previous slides.
- 2) Previous images was highlighted and clicked on and this is the next screen
- 3) We scroll down from the photo and see text below the image note these are not links to images, but images embedded with text
- 4) Here is the bedroom image as listed on image #1

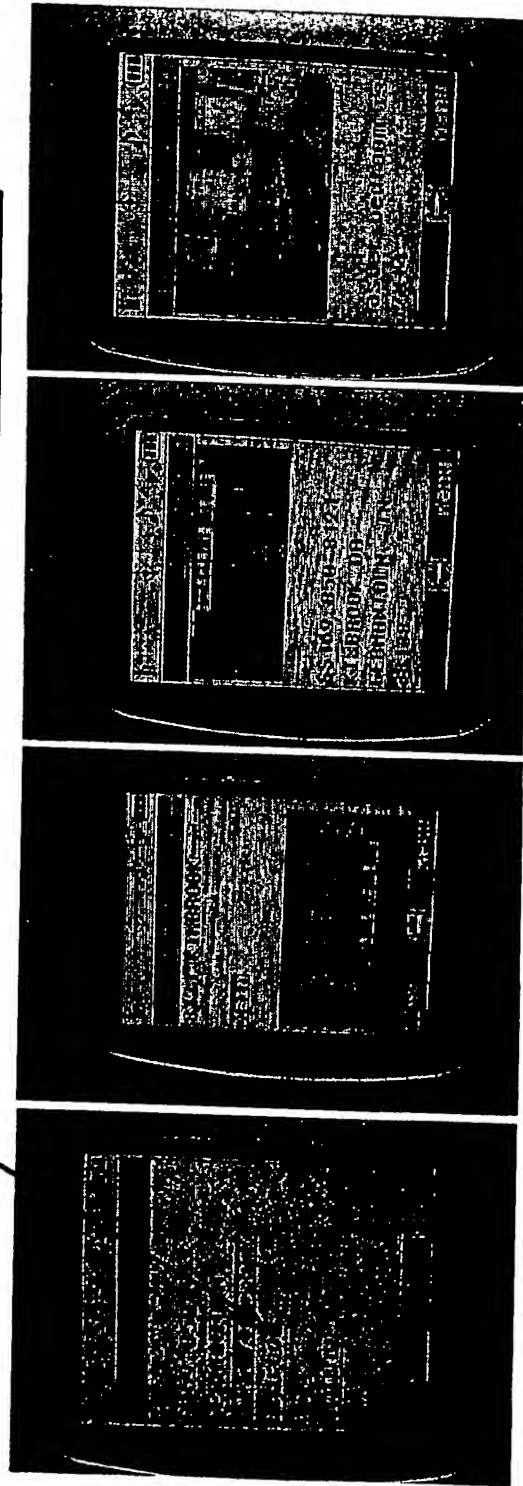


Image #1

Image #2

Image #3

Image #4

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